


Current transformer - PACT RCP-4000A-1A-D95 - 2904921

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Set consisting of a 1 A measuring transducer and a Rogowski coil with signal line. Length of Rogowski coil: 300 mm, diameter: 95 mm. Length of signal line: 3 m. The Rogowski coil measures the AC current of busbars and power lines.



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 046356 900966 |
| GTIN | 4046356900966 |
| Weight per Piece (excluding packing) | 416.700 g |
| Custom tariff number | 85437090 |
| Country of origin | Germany |

Technical data

Dimensions

| | |
|--------|---------|
| Width | 22.5 mm |
| Height | 85 mm |
| Depth | 70.4 mm |

Ambient conditions

| | |
|---|---|
| Ambient temperature (operation) | -30 °C ... 80 °C (Measuring coil) |
| | -20 °C ... 70 °C (Measuring transducer) |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C (Measuring coil) |
| | -25 °C ... 85 °C (Measuring transducer) |
| Maximum altitude | < 2000 m |
| Permissible humidity (operation) | 5 % ... 95 % (non-condensing) |
| Measuring coil degree of protection | IP67 (not assessed by UL) |
| Measuring transducer degree of protection | IP20 |

Measuring transducer supply

| | |
|------------------------|-------------------------|
| Nominal supply voltage | 24 V DC -20 % ... +25 % |
|------------------------|-------------------------|

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Measuring transducer supply

| | |
|------------------------------|-----------------------|
| Nominal supply voltage range | 19.2 V DC ... 30 V DC |
| Max. current consumption | 190 mA |
| Power consumption | 4 W |

Measuring coil input data

| | |
|---------------------------|--------------------|
| Frequency measuring range | 40 Hz ... 20000 Hz |
| Position error | < 1 % |
| Linearity error | 0.1 % |

Measuring transducer input data

| | |
|--|---|
| Measuring ranges (current) | 100 A 250 A 400 A 630 A 1000 A 1500 A 2000 A 4000 A |
| Configurable/programmable | Via DIP switches |
| Phase angle | < 1 ° |
| Rated power | 1.5 VA |
| Max. distances for copper cables at $P_{N\ max}$ | 32 m (0.75 mm ² (AWG 20)) |
| | 64 m (1.5 mm ² (AWG 16)) |
| | 107 m (2.5 mm ² (AWG 14)) |

Measuring transducer signal input

| | |
|-------------------------|----------------------------------|
| Input signal (at 50 Hz) | 100 mV (1000 A) |
| Input impedance | 27 kΩ (smallest measuring range) |

Measuring coil signal output

| | |
|---|--|
| Output signal (at 50 Hz) | 100 mV (no load, at 1,000 A) |
| Output voltage (in no-load operation) | $V_{OUT} = M \cdot di/dt$ |
| Output voltage (sinusoidal, in no-load operation) | 100 mV ($V_{OUT} = 2 \cdot \pi \cdot M \cdot f \cdot I$ (M = 0.318 μH; example: At 50 Hz; I = 1,000 A)) |

Measuring transducer signal output

| | |
|-----------------------|----------------|
| Current output signal | 0 A AC ... 1 A |
| Load | 0 Ω ... 1.5 Ω |

General data, measuring coil

| | |
|---------------------------------|---------------------------------|
| Length of measuring coil | 300 mm |
| Diameter of measuring coil | 8.3 mm ±0.2 mm |
| Length of signal cable | 3000 mm |
| Conductor structure signal line | 2x 0.22 mm (Signal (tinned)) |
| | 1x 0.22 mm (Shielding (tinned)) |
| Coil material | Elastollan |
| Housing material | PC |
| Insulation | double insulation |
| Rated insulation voltage | 1000 V AC (rms CAT III) |
| | 600 V AC (rms CAT IV) |
| Test voltage | 10.45 kV (DC / 1 min.) |

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General data, measuring coil

| | |
|----------------|---------------------|
| Basic accuracy | <± 0.21 % |
| UL, USA/Canada | UL 61010 Recognized |

General data for measuring transducer

| | |
|----------------------------|---|
| Linearity error | < 0.5 % (From the range end value) |
| Maximum transmission error | ≤ 0.5 % (From the range end value) |
| Frequency range | 45 Hz ... 65 Hz |
| Max. detectable harmonics | < 2 kHz |
| Current consumption | < 190 mA (at 19.2 V) |
| Housing material | Polyamide |
| Test voltage | 1.5 kV AC (Supply/input and output: 50 Hz, 1 min) |
| Operating voltage display | Green LED |
| UL, USA/Canada | UL 508 Listed |

General data

| | |
|--------------------------|--|
| Standards/regulations | IEC 61010-1 |
| | IEC 61010-2-032 |
| Insulation | double insulation |
| Degree of pollution | 2 |
| Overvoltage category | III (1,000 V, to neutral conductor) |
| | IV (600 V, to neutral conductor) |
| Temperature coefficients | 0.005 %/K (+10°C ... +70°C; both components have the same ambient temperature) |
| | 0.07 %/K (-20°C ... +10°C; both components have the same ambient temperature) |
| Typical measuring error | < 1 % |

Connection data

| | |
|----------------------------------|---|
| Connection name | Measuring transducer side |
| Connection method | Screw connection |
| Stripping length | 7 mm |
| Screw thread | M3 |
| Conductor cross section solid | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section flexible | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section AWG | 24 ... 14 |
| Torque | 0.5 Nm ... 0.6 Nm |

Standards and Regulations

| | |
|-----------------------|-------------------------------------|
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Technical data

Environmental Product Compliance

| | |
|------------|---|
| REACH SVHC | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27210902 |
| eCl@ss 4.1 | 27210902 |
| eCl@ss 5.0 | 27210902 |
| eCl@ss 5.1 | 27210900 |
| eCl@ss 6.0 | 27210900 |
| eCl@ss 7.0 | 27210902 |
| eCl@ss 8.0 | 27210902 |
| eCl@ss 9.0 | 27210902 |

ETIM

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|----------|----------|
| ETIM 3.0 | EC002048 |
| ETIM 4.0 | EC002048 |
| ETIM 5.0 | EC002048 |
| ETIM 6.0 | EC002048 |
| ETIM 7.0 | EC002048 |

UNSPSC

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|-------------|----------|
| UNSPSC 13.2 | 39121032 |
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Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

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Approvals

| | | |
|-----|---|--------------------------|
| EAC |  | RU C- DE.A*30.B.01082 |
|-----|---|--------------------------|

Accessories

Accessories

Mounting material

Holder - PACT RCP-CLAMP - 2904895



The optional holding device ensures the Rogowski coil is securely seated on busbars with a thickness of 10 ... 15 mm. During installation, the coil housing is pushed onto the flange of the holding device and snaps in automatically.

Holder - PACT RCP-CLAMP-5-10 - 2907888



The optional holding device ensures the Rogowski coil is securely seated on busbars that are 5 ... 10 mm thick. During installation, the coil housing is pushed onto the flange of the holding device and snaps in automatically.